



CLAIM

I claim:

1. A) An indexed database alarm and monitor, for assigning each unit of a multiple unit system,

a labeled index of pre-selected designations and or descriptions of use by voice-playback

and reporting, by voice-playback first detecting units designation and or description of use
said by each unit in the system;

consisting of the following components, a fire sensor, an alarm IC with piezo horn output
and detection I/O, a multiple position encoder, a 8-bit dip switch, a radio frequency decoder
transmitter and receiver encoder, with antenna switch and antenna, a voice-playback device
with speaker, and a microcontroller all housed within one unit;

a complete system being comprised of a plurality of said units, equal to the number of
positions, on the multiple position encoder;

Whereas said multiple position encoder has labeled positions and outputs a different 4-bit

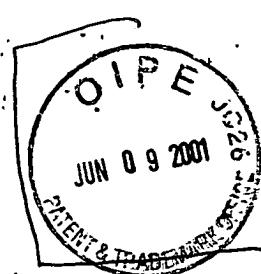
binary coded decimal at each position to be used as a database index, Whereas said

voice-playback device contains indexed pre-recorded voice segments, as a database;

Whereas said labeled positions, relate to the indexed voice segments, and the multiple position
encoders, output is used as the index into the voice segment database, being mapped one-to-one
into the 8-bit starting address of a voice segment;

Whereas said radio frequency decoder transmitter decodes and transmits a 12-bit signal,
consisting of an 8-bit system ID from the 8-bit dip switch, and the 4-bit index from the multiple
position encoder, the radio frequency receiver encoder validates the 8-bit system ID and outputs

the 4-bit index, Whereas said antenna switch and antenna default to the radio frequency receiver
encoder unless fire sensor detects smoke, in which case antenna switch is enabled and antenna
is applied to the decoder transmitter;



CLAIM (cont.)

Whereas said microcontroller is used as a state machine and is interrupt driven with 3-states
initialization, monitor and interrupt, only two interrupts are allowed interrupt 1-local, fire sensor
said
initialization, monitor and interrupt, only two interrupts are allowed interrupt 1-local, fire sensor
said
detects smoke, and interrupt 2-remote, receiver encoder validates transmission of matching
said
8-bit system ID.

b
b A1
b
b Cond
1

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